APPENDIX A

U.S. Fish and Wildlife Service List of Threatened, Endangered, and Species Proposed for Listing that May Occur Within the Wallace Creek Project Area

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
4000 Airport Parkway
Cheyenne, Wyoming 82001

In Reply Refer To:
ES-61411/W.19/WY7124

April 21, 2003

Robert M. Anderson
Anderson Environmental Consulting
P.O. Box 3586
Casper, Wyoming 82602

Dear Mr. Anderson:

Thank you for your letter of April 10, 2003, regarding a request for a species list for the Wallace Creek Raderville Natural Gas Development Project located in T34N, R87W, sections 15, 21, 22, 28, and 27 in Hot Springs County, Wyoming. According to your letter the project includes 10 natural gas wells.

In accordance with section 7(c) of the Endangered Species Act of 1973 (Act), as amended, (50 CFR §402.13), my staff has determined that the following threatened or endangered species, or species proposed for listing, may be present in the project area.

SPECIES	STATUS	HABITAT
Bald eagle (*Haliaeetus leucocephalus*)		Found throughout state
Black-footed ferret (*Mustela nigripes*)	Endangered	Prairie dog towns
Ute ladies'-tresses (*Spiranthes diluvialis*)	Threatened	Seasonally moist soils and wet meadows of drainages below 7000 feet
Mountain plover (*Charadrius montanus*)	Proposed	Grasslands and prairie dog towns

If the proposed action will lead to water depletions (consumption) in the Platte River System, impacts to threatened and endangered species inhabiting the downstream reaches of this system should be included in the evaluation.

Platte River species	Endangered	Downstream riverine habitat of the Platte River in Nebraska

Bald eagle: While habitat loss still remains a threat to the bald eagle's full recovery, most experts agree that its recovery to date is encouraging. Bald eagles may live up to 30 years in the wild. Adult eagles establish life-long pair bonds and build huge nests in the tops of large trees near rivers, lakes, marshes, or other wetland areas. Bald eagle may use the same nest in consecutive years. Although bald eagles may range over great distances, they usually return to nest within 100 miles of where they were fledged.

In order to reduce potential adverse effects to the bald eagle, a disturbance-free buffer zone of 1-mile should be maintained around eagle nests and winter roost sites. Activity within 1 mile of an eagle nest or roost may disturb the eagles and result in "take." If a disturbance-free buffer zone of 1-mile is not practicable, then the activity should be conducted outside of February 15 - August 15 to protect nesting birds and November 1 through April 15 to protect roosting birds.

Black-footed ferret: Black-footed ferrets may be affected if prairie dog towns are impacted. If black-tailed prairie do (*Cynomys ludovicianus*) towns or complexes greater than 79 acres or white-tailed prairie dog (*Cynomys leucurus*) towns or complexes greater than 200 acres will be disturbed, surveys for ferrets are recommended in order to determine if the action will result in an adverse effect to the species. Surveys are recommended even if only a portion of the town or complex will be disturbed. According to the *Black-Footed Ferret Survey Guidelines* (USFWS 1989), a prairie dog complex consists of two or more neighboring prairie dog towns each less than 7km from each other. If a field check indicates that prairie dog towns may be affected, you should contact this office for guidance on ferret surveys.

Ute ladies'-tresses: Ute ladies'-tresses is a perennial, terrestrial orchid with stems 8 to 20 inches tall, and flowers consisting of white or ivory flowers clustered into a spike arrangement at the top of the stem. *Spiranthes* blooms from late July through August, however, depending on location and climatic conditions, it may bloom in early July or still be in flower as late as early October. *Spiranthes* is endemic to moist soils near wetland meadows, springs, lakes, and perennial streams where it colonizes early successional point bars or sandy edges. The elevation range of known occurrences is 4,200 to 7,000 feet in alluvial substrates along riparian edges, gravel bars, old oxbows, and moist to wet meadows. *Spiranthes* seems intolerant of shade and small scattered groups are found primarily in areas where vegetation is relatively open. Surveys should be conducted by knowledgeable botanists trained in conducting rare plant surveys. The Service does not maintain a list of "qualified" surveyors but can refer those wishing to become familiar with the orchid to experts who can provide training/services.

Mountain Plover: Mountain plover breeding and wintering habitats are known to include grasslands, mixed grassland areas and short-grass prairie, shrub-steppe, plains, alkali flats, agricultural lands, cultivated lands, sod farms, and prairie dog towns. Plovers may nest on sites where vegetation is sparse or absent, or near closely cropped areas, manure piles or rocky areas. Mountain plovers are rarely found near water and show a preference for previously disturbed areas or modified habitat.

To minimize potential adverse impacts to plovers in sites planned for development, the Service recommends surveys for mountain plovers in all suitable habitat as well as avoidance of nesting areas from April 10 through July 10. Please refer to the *Mountain Plover Survey Guidelines*

(March 2002), for information regarding surveys and protection stipulations. While the Service believes that surveys and avoidance of nesting and brood rearing areas will reduce the chances of direct impacts to and mortality of individual mountain plovers within the area, we also recommend consideration of changes in habitat suitability and habitat loss during project planning.

We strongly encourage the lead federal agency to develop protective measures, with an assurance of implementation should mountain plovers be found within the project areas. Although conferencing on species proposed for listing is only required when the proposed action is likely to jeopardize that species, development of protective measures through conferencing can expedite consultation requirements should the species be listed prior to the completion of the project/actions.

Platte River water depletions: Water depletions to the Platte River system may affect the federally listed whooping crane (*Grus americana*), interior least tern (*Sterna antillarum*), piping plover (*Charadrius melodus*), pallid sturgeon (*Scaphirhynchus albus*), bald eagle (*Haliaeetus leucocephalus*), Eskimo curlew (*Numenius borealis*), and western prairie fringed orchid (*Platanthera praeclara*). In addition, depletions may contribute to the destruction or adverse modification of designated critical habitat for the whooping crane, and proposed critical habitat for the northern Great Plains breeding population of the piping plover. Depletions include evaporative losses and/or consumptive use, often characterized as diversions from the Platte River or its tributaries less return flows. Project elements that could be associated with depletions to the Platte River system include, but are not limited to, ponds (detention/irrigation storage/stock watering), reservoirs (irrigation storage/power generation), hydrostatic testing of pipelines, wells, diversion structures, dust abatement, and water treatment facilities. Any actions that may result in a water depletion to the Platte River system should be identified. The document also should include an estimate of the amount and timing (by month) of average annual water depletion (both existing and new depletions), and should describe methods of arriving at such estimates.

CONSULTATION

Section 7 (a)(2), of the Act, requires consultation with the Service when a Federal action may affect a listed species. This consultation will ensure that any action authorized, funded or carried out by a Federal agency is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. The process is initiated by the Federal agency after it has determined if its action may affect (adversely or beneficially) a listed species. Section 7(a)(4) requires conferencing with the Service when a Federal action is likely to jeopardize the continued existence of a proposed species or result in destruction or an adverse modification of proposed critical habitat. Section 7(c) requires that a biological assessment be prepared for any Federal action that is a major construction activity to determine the effects of the proposed action on listed and proposed species.

If a biological assessment is not required (i.e., all other actions), the lead Federal agency is responsible for review of proposed activities to determine whether listed species will be affected. The Service would appreciate the opportunity to review any such determination document. If it is determined that the proposed activities may affect a listed species, you should contact this

office to discuss consultation requirements. If it is determined that any Federal agency program or project "is likely to adversely affect" any listed species, formal consultation should be initiated with this office. Alternatively, informal consultation can be continued so we can work together to determine how the project could be modified to reduce impacts to listed species to the "not likely to adversely affect" threshold. If it is concluded that the project "is not likely to adversely affect" listed species, we should be asked to review the assessment and concur with the determination of not likely to adversely affect.

For those actions where a biological assessment is necessary, it should be completed within 180 days of receipt of a species list, but can be extended by mutual agreement between the lead agency and the Service. If the assessment is not initiated within 90 days of receipt of a species list, the list of threatened and endangered species should be verified with me prior to initiation of the assessment. The biological assessment may be undertaken as part of the agency's compliance of section 102 of the National Environmental Policy Act (NEPA), and incorporated into the NEPA documents. The Service recommends that biological assessments include:

1. a description of the project;
2. a description of the specific area potentially affected by the action;
3. the current status, habitat use, and behavior of threatened and endangered species in the project area;
4. discussion of the methods used to determine the information in item 3;
5. direct and indirect impacts of the project to threatened and endangered species, including impacts of interrelated and interdependent actions;
6. an analysis of the effects of the action on listed and proposed species and their habitats including cumulative impacts from Federal, State, or private projects in the area;
7. measures that will reduce or eliminate adverse impacts to threatened and endangered species;
8. the expected status of threatened and endangered species in the future (short and long term) during and after project completion;
9. determination of "is likely to adversely affect" or "is not likely to adversely affect" for listed species;
10. determination of "is likely to jeopardize" or "is not likely to jeopardize" for proposed species;
11. alternatives to the proposed action considered, a summary of how impacts of those alternatives on listed and proposed species would differ from the proposed action, and the reasons for not selecting those alternatives;
12. citation of literature and personal contacts used in the assessment.

CANDIDATE SPECIES

The black-tailed prairie dog (*Cynomys ludovicianus*) is a candidate species and may occur in the project area. Many Federal agencies have policies to protect candidate species from further population declines. We would appreciate receiving any information available on the status of the black-tailed prairie dog in or near the project area. In addition, if this species is listed prior to

the completion of the project, unnecessary delays may be avoided by considering project impacts to candidate species now. Should this species be proposed for listing, the lead Federal agency would be required to confer with this office if that agency determines their action (e.g. approval of the project) is likely to jeopardize the continued existence of this species.

MIGRATORY BIRDS

Under the Migratory Bird Treaty Act (MBTA), 16 U.S.C. 703 and Bald and Golden Eagle Protection Act (BGEPA), 16 U.S.C. 668, the Federal agency has a mandatory obligation to protect the many species of migratory birds, including eagles and other raptors which may occur on lands under their jurisdiction. The MBTA, enacted in 1918, prohibits the taking of any migratory birds, their parts, nests, or eggs except as permitted by regulations and does not require intent to be proven. Section 703 of the Act states, "Unless and except as permitted by regulations ... it shall be unlawful at any time, by any means or in any manner, to ... take, capture, kill, attempt to take, capture, or kill, or possess ... any migratory bird, any part, nest, or eggs of any such bird..." The BGEPA, prohibits knowingly taking, or taking with wanton disregard for the consequences of an activity, any bald or golden eagles or their body parts, nests, or eggs, which includes collection, molestation, disturbance, or killing.

The Service recommends surveys within 1-mile of each project right-of-way to identify raptor species that may be using the project area. Surveys should be conducted during the appropriate time of year in order to observe active courtship and nesting.

SENSITIVE SPECIES

Federal agencies are also encouraged to consider sensitive species or species at risk in project review. Your consideration of these species is important in preventing their inclusion on the Endangered Species List. The Wyoming Natural Diversity Database maintains the most current information on sensitive species in Wyoming. The database must charge for data retrieval to financially support the database and staff. The staff can be contacted at (307) 766-5026.

SAGE GROUSE

The Service has received several petitions to list the greater sage-grouse (*Centrocercus urophasianus*) under the Act. The causes for the greater sage-grouse rangewide decline are not completely understood, and may be influenced by local conditions. However, habitat loss and degradation, as well as loss of population connectivity are important factors (Braun 1998, Wisdom et al. 2002). Any activities that result in loss of sagebrush, or degrade important sage-grouse habitats, should be closely evaluated for their impacts to sage grouse.

Greater sage-grouse are dependent on sagebrush. Population and habitat analyses suggest that wintering habitat can be as limiting as mating and breeding habitats. Therefore, you should work with the local Wyoming Game and Fish biologist to identify important greater sage-grouse habitats within the project area, and appropriate mitigative measures to minimize potential impacts from the proposed project. The Service recommends surveys and mapping of important greater sage-grouse habitats where local information is not available. The results of these surveys should be used in project planning, to minimize potential impacts to this species. No project activities that may exacerbate habitat loss or degradation should be permitted in important habitats.

In 2000, the U.S. Forest Service, the Bureau of Land Management, and the U.S. Fish and Wildlife Service signed a Memorandum of Understanding (MOU) with the Western Association of Fish and Wildlife Agencies to conserve the greater sage-grouse and its habitat. This MOU outlined the participation of Federal agencies in greater sage-grouse conservation, and these commitments should be considered in project planning in sage-grouse habitat. Additionally, unless site-specific information is available, greater sage-grouse habitat should be managed following the guidelines by Connelly *et al.* (2000).

We appreciate your efforts to ensure the conservation of endangered, threatened, and candidate species and migratory birds. If you have further questions regarding this letter or your responsibilities under the Act, please contact Kathleen Erwin of my staff at the letterhead address or phone (307)772-2374, extension 28.

Sincerely,

Jodi L. Bush
Acting Field Supervisor
Wyoming Field Office

References

Braun, C.E. 1998. Sage grouse declines in western North America: What are the problems? Proceedings of the Western Association of Fish and Wildlife Agencies 78:139-156

Connelly J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage grouse populations and their habitats. Wildlife Society Bulletin 28(4): 967 - 985.

Wisdom, M.J., B.C. Wales, M.M. Rowland, M.G. Raphael, R.S. Holthausen, T.D. Rich, and V.A. Saab. 2002. Performance of Greater Sage-Grouse models for conservation assessment in the Interior Columbia Basin, USA. Conservation Biology16: 1232-1242.

cc: Bureau of Land Management, Casper Field Office (W. Fitzgerald)
WGFD, Statewide Habitat Protection Coordinator, Cheyenne (T. Collins)
WGFD, Nongame Coordinator, Lander (B. Oakleaf)